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SOME ACCOUNT

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OF

C R E T I N I S M,

AND

THE INSTITUTION FOR ITS CURE, ON  
THE ABENDBERG,

*NEAR INTERLACHEN, IN SWITZERLAND.*

BY

WILLIAM TWINING, M.D.

*LATE OF BALLIOL COLLEGE, OXFORD.*



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M.DCCC.XLIII.



TO  
THE RIGHT REVEREND  
CHARLES-RICHARD,  
LORD BISHOP OF WINCHESTER,  
PRELATE  
OF THE MOST NOBLE ORDER  
OF THE GARTER,  
&c. &c.  
THESE PAGES ARE,  
WITH HIS LORDSHIP'S KIND PERMISSION,  
MOST RESPECTFULLY  
INSCRIBED.



AN accidental meeting with a kind friend on the Lake of Brienz, in September, 1842, having given rise to this publication, I have now to express my best thanks to that friend, the Rev. Edward James, Canon of Winchester and Vicar of Alton, for his valuable and judicious assistance. The authority for many of the scientific statements will be found in the work of Dr. Troxler, quoted at p. 8.

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The undersigned members of the Committee for advocating the claims of the Cretins, and the Institution for their cure and education on the Abendberg, near Interlachen, in the Canton of Berne, appoint Dr. W. TWINING, their advocate and correspondent in England, and hope that he will do all in his power to aid their benevolent design.

His Excellency Burgomaster VON MURALD, Zurich.

His Excellency SCHULTHEISS VON NEUHAUS, Berne.

Herr SCHULTHEISS SALIS, *Chief of the Exchange*, Zurich.

Dr. KERN, *President of the Supreme Court*, Frauenfeld.

Dr. AUSSCHUSS, *Physician*.

Professor Dr. TROXLER, Berne.

Madame TROXLER, Berne.

Dr. NIEDERER, Geneva.

Professor PERE GIRARD, Freyburg.

Professor Dr. HOTTINGER, Zurich.

GEROLD MEYER VON KNONAU, Zurich.

Dr. GUGGENBÜHL, Superintendent of the Institution.

“Cent mille hommes dans moins d’un siècle sont frappés dans les vallées des Alpes par cette cruelle maladie, qu’aucun livre jusqu’ici n’a bien définie, que nul art n’a cherché à combattre. Non, je ne serais pas venu dans ces contrées sans jeter un cri de douleur en faveur de cette population malheureuse ! Ce saint devoir m’est inspiré ; je sens que j’agrandis ma mission. On cherche tous les jours à améliorer les races des animaux, et l’on abandonnerait ainsi les hommes ! O toi, justement célèbre, qui quittas la patrie pour visiter les hôpitaux et les prisons de l’Europe, afin de rendre la salubrité avec la vie aux infortunés habitans de ces asyles, Howard, si tu vis encore, viens, accours dans les vallées des Alpes, elles sont dignes de ta sensibilité et de ton génie !”

*Le Valais, et les Mœurs de ses Habitans.*—Echasseriaux, Paris.



SOME ACCOUNT  
OF  
CRETINISM.

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THERE is no part of the history of Switzerland so interesting as that which records the glorious victories of the mountaineers in the defence of their freedom. Still, while we may rejoice in such deeds, we should not forget that it is in the valleys amidst these beautiful mountains, that the most pitiable of our fellow-creatures, called Cretins, are chiefly found. The prevalence of goitre was commonly known in the time of Juvenal, and as that disease is often in the Alps connected with imperfect development of mind, it is probable that Cretins, in whom there is a want of bodily and mental vigour, were early known in the same localities.

The first idea of forming an institution for the cure of Cretins originated with Dr. Guggenbühl, a young Swiss physician, who has already entered on the task of raising up these poor creatures from their state of bodily disease and mental imbecility. It is in truth, a noble and exalted idea, that, through human exertions, a mind may be awakened, in what was apparently a senseless mass, and that even education may be extended to those, who have been hitherto

considered beyond the reach of instruction, and incapable of intercourse with their fellow-creatures.

Dr. Guggenbühl was born at Meilen, in the canton of Zurich, and was educated in the Protestant faith. He pursued his medical studies at Zurich, and from his early youth felt a secret longing to explore the higher range of the Swiss Alps.

It was not, however, till an epidemic fever prevailed in 1836, that, having completed his studies, he visited a large district of the Alps, in order to ascertain its causes and prevalence. He then became so strongly impressed with the wretchedness of the inhabitants of the valleys, where Cretinism was endemic\*, that he determined to devote all his means, time, and thoughts to ameliorating their condition.

In order to learn the true character of the Cretins, he at first selected the small retired valley of Sernf, in the Canton Glarus, where he resided two years as a physician, amongst them.

Having thus well studied Cretinism as a disease, he travelled in a very mountainous part of Switzerland to ascertain its prevalence and localities. From this time the subject took even stronger possession of his mind, and the idea weighed heavily on him, that this numerous and miserable class of beings, who filled the valleys, was left to sink deeper in their misery without one effort being made to help them. It

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\* Endemic is a word applied to those diseases which occur among the inhabitants of a particular place or country, in consequence of something local or peculiar in the air, or water, or soil, or in the food and habits of the people.

was then that Dr. Guggenbühl resolved to apply for support to the Swiss Association for the Advancement of Science, and the result was most favourable to his wishes.

At the meeting of the members of this Society, held at Freyburg in 1840, consisting of professors, medical men, and the clergy, it was resolved to procure a statistical report of the prevalence of Cretinism throughout Switzerland. And at a meeting of the Scientific Society at Zurich, it was determined to bring the subject, as one of great national interest, before the government at Berne, and ultimately the sum of 600 Swiss francs was given in aid of the establishment.

The following is an extract from a letter written by Dr. Guggenbühl in 1840, soon after the commencement of his undertaking. He says, "Only two months having elapsed since the beginning of my plan, no great results can be expected, though we can already see a decided improvement in the children. It is therefore to be hoped that through the interest now awakened in different countries of Europe, this source of misery may be inquired into and relieved. To this end the Abendberg will contribute its humble mite: and I myself will dedicate my life and all my powers to this sadly neglected class of mankind, and regardless of all difficulties, will strive to realise the wish, which day and night is the continual subject of my thoughts."

If any one should doubt what noble motive, what patience, and judicious skill is needed in such a work,

let him read the two first chapters of M. Itard's account\* of the savage of Arveyron. He will then fully appreciate the magnitude of the task, which Dr. Guggenbühl has undertaken, with no hope of wealth or fame, but the noblest ambition of rescuing the most degraded of his race from their wretchedness. This is no case of blind enthusiasm in a desperate cause, but an instance of sincere devotion in one, who deeply feels his own responsibility which is concerned in his great work, of raising these unfortunate beings to intelligence and moral consciousness.

The scene of this experiment is on the Abendberg, near Interlachen, in the canton of Berne, where Dr. Guggenbühl has purchased a cottage, as well as a piece of land around it. The institution, it is true, does not at present possess the advantages which it needs, the accommodations being quite inadequate even for the present number, which is eleven, and the nature of the building prevents all proper ventilation. The situation, however, is most favourable, from the purity of the air, and the excellence of the springs. It is also 3600 feet above the level of the sea, an elevation greater by a thousand feet than that of any part where Cretinism is endemic†. In summer the air is more invigorating than in the valley, and in

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\* *Rapport sur l'Etat actuel du Sauvage d'Arveyron*, par E. M. Itard, docteur en médecine, Médecin de l'institution Imperiale des Sourds-muets. Paris, 1807.

† Dr. Troxler on *Der Cretinismus und seine formen als endemische menschenentartung in der Schweiz*, p. 25.

winter it is warmer, as the rays of the sun reach it sooner, and leave it later, and the south winds from Italy lessen the intensity of the cold. It is also free from any malaria, as well as from every cause of Cretinism, as far as relates to climate. It is hoped, therefore, that in the present year funds may be raised to enable Dr. Guggenbühl to carry out his plan of erecting a stone building, suited to the purposes of a hospital, and large enough to receive fifty or sixty patients.

It was during a short visit at Interlachen, in September 1842, that my attention was first directed to the subject of Cretinism, and I determined to go and judge of the truth of what I had heard, and to see the originator of this noble work. Mr. Ober, of Interlachen, accompanied us, and we started at an early hour. Nothing could exceed the brilliancy of the morning, as the sun shone forth with additional beauty after the late heavy rain; when the mountains had been wrapped in clouds. Now all was bright and clear, and we could once more admire the lovely outline of the Jungfrau against a cloudless sky, though our thoughts centred in the object of our expedition. The ascent of the Abendberg is steep, but it presents no difficulties that need deter any traveller from visiting the institution. The greater part of the way is through fir forests, which generally exclude all view, but occasionally allow delightful glimpses of the lakes of Thun and Brienz. Nearly at the summit of the mountain we came to an open space of grass land, and then saw the small *châlet*, the scene of Dr. Guggenbühl's benevolent labours.

It is difficult to imagine a more lovely spot, or a view more exquisite than that which was displayed before us. The glorious chain of the snow mountains, the Eigler, Mönch, and Jungfrau, are there seen in all their grandeur, whilst far beneath lie the lake of Brienz, and the green valley of Interlachen. On entering the humble chalet, the scene was most impressive; our visit was unexpected, and we found Dr. Guggenbühl engaged in instructing his little patients. His fatherly smile, and the kind manner of his assistant were not lost even on these scarcely human beings, for several would look up with an expression of happiness. A more strange or more interesting school-room was never seen; to watch the familiar process by which we all unconsciously learn to speak in infancy, here adopted to teach children of any age under six, systematically and with effort, was a matter of deep interest. Here, indeed, was a task of real difficulty, as the organs, far from being ready and eager to receive impressions, were so dull that the strongest means were needed to make them act in any degree. Several of the children were ranged round a table, in chairs formed to support those who could not otherwise sit upright; in nearly all there were the evident signs of their fearful malady, and the dull hopeless look of almost perfect idiocy. On a bed on one side of the room lay one poor creature who was too great a sufferer to be yet able to join in the instruction which the others were receiving.

As this one, who was three years of age, exhibited Cretinism in its highest degree, a description of



her state may not be inappropriate. She was wrapped in a cloth, so that her face only was visible. The lids of the eyes were constantly quivering and the eyes rolling,—the tongue large and so swollen, that the saliva was running from her mouth, and all her limbs were moving convulsively. So dreadful a sight could scarcely be imagined—a human being devoid not only of all which characterizes a rational creature, but even a healthy brute animal: and yet even she is improving, so that the day will come, whether it be a year or even two years distant, when she will know the blessings of health and knowledge.

The ear is the first organ to be roused from its state of apathy, or slumber; and this is effected by compressing the sound through a tube into the ear. The child is then taught to perform with its mouth the motion, which is required to express the sound, and so to connect the sound itself with the mode of expressing it, which is by degrees attained; and thus it passes through the vowels. In order to bring other organs into play, the letters are carved out in wood, and they then learn to connect these with the sounds, according as the organs of touch or sight are developed. Gradually, by this method they form words, which they utter. When all this is well acquired the common utensils, as knives, keys, forks, or spoons, are painted, and the instruments laid before them: and thus they learn, not only to distinguish them, but to place them on their pictures. Sometimes, when this process does not avail to fix the sight on an object, marks or letters are figured with phosphorus

on the walls of the room, and then the instruction begins, in winter, after sunset, or in summer, in a darkened room. And this method often proves effectual, when others fail. Smell and taste also need development, as many would swallow whatever was placed in the mouth, and would pay no attention to any odour. When the hour of instruction closed, came that of amusement, and here the Doctor's kind manner was equally conspicuous, whether the child was swinging, playing with a doll or beating a drum, or still sitting unconscious of all around it. Day and night the sole thought of this zealous and benevolent man is the happiness and improvement of these poor creatures; in him they have at once a father, teacher, and physician, well qualified by natural disposition and acquired attainments to act in all those characters.

As this malady affects the body as well as the mind, Dr. Guggenbühl devotes all the earlier part of the time that the Cretin is in the establishment to strengthening the body, knowing how much the mind is dependent on it. The pure, invigorating air, judicious food, and cold baths, or frictions to strengthen the limbs, soon induce an entire change in the whole being. As soon as the organs begin to assume the normal state, the development of the intellectual faculties commences, and here is the greatest difficulty, but still the most important part of the task. Mr. Ober, who had accompanied us, had seen the poor sufferers at the time of their admission, and was therefore able to make us duly appreciate the vast change that had taken place; so great, indeed, that



had I not known how fully I could depend on him as a witness, I must have doubted such a wonderful improvement. There were two cases which I particularly observed, and these will best illustrate the progress that had been made.

M. S., when two years of age, was sent to the institution for incipient Cretinism. She was then extremely ill, not being able to hold up her head, stand, or move her limbs. The face was of a livid, dirty white colour, the tongue swollen, the muscles soft, and the skin wrinkled and dry, the head was also mis-shapen. During the summer months the fresh mountain air, appropriate food, and strengthening medicine, brought her to a conscious state. When the mother saw her, two months after her admission, she said that she should hardly have known her, so great was the improvement in her health. Her age at the time of our visit was three years and a half. A quarter of a year was sufficient to bring her to such a state of bodily vigour, that she was fit for instruction, so that she had then been taught a year and a quarter. She is now strong, able to walk, and feed herself, knows all the parts about the house, can say the letters, and several words of one syllable. As an instance of growing intelligence in what was a short time before a senseless mass, she was told to take a spoon from amongst knives and forks, and place it on its corresponding picture; she put it the wrong end upwards, and on being told so, placed it right. Her bodily appearance is so much improved, that no one would suppose, judging from that alone, that she

ever was a Cretin, so rosy are her cheeks, and so happy is her expression.

F. S. was six years old on admission, an age at which the chances are greatly against a cure. The mother said that at his birth he had a very large head, and that his development proceeded very irregularly. When received into the establishment, he could scarcely walk; he had an excessively dull look, and could not fix his eyes on any object; the tongue was so thick that he could not speak, and the only sound which he ever uttered was like the cry of a brute animal. His only occupation had hitherto been to watch a piece of wood in the convulsive quiverings of his fingers. His constitution was very scrofulous, as was evident in the swollen glands. It required a month's constant effort before his attention could be directed to any object. His age, when we saw him, was seven years, and vast is the difference between his present state and that at the time of his admission. His countenance is no longer unlike that of a well-developed child; he can feed himself, plays on a drum, and speaks the vowels distinctly. Great, too, is the improvement in the bodily powers, as he can walk steadily, and the swelling of the glands has wholly disappeared. The first three quarters of the year were devoted to bodily improvement, so that he had been taught only a quarter.

There are several like cases, which might be adduced to prove how great may be the improvement, but these, it is believed, are sufficient to show, that the treatment is founded on just principles. Cretins

are no longer held to be such, when the physical powers are so strengthened that they can employ themselves in some manual occupation, by which they may earn a living, and when the intellect is so improved as to be fit for moral and religious instruction. Three of the children have already left the Institution, and are now attending the schools in their native villages.

In a letter written by Mr. Ober last February, he states, that all the little patients were gradually improving, and especially one from Prussia, who was eight years of age\*. At the time of her admission, eight months ago, she could neither stand nor feed herself. She has now acquired the full use of her limbs, and has entered on the course of education. Two others have been entrusted to the care of Dr. Guggenbühl, by the decision of the "Legislative body of the nation." The Canton Valais, where there is a great number of Cretins, has begun to take an interest in the Institution, and has contributed pecuniary aid.

Enough has now been stated to show that Dr. Guggenbühl's plan for the cure of Cretinism has not been formed without good foundation. The success which has attended his treatment in every instance, where a patient has remained under his care long enough to show any result at all, affords satisfactory proof that the treatment is judicious, and the plan well deserving of such encouragement and support, as may enable him to make the proposed enlargement of his institution, and adopt more extended measures

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\* This is the only patient with whom pay was received.

for the relief of that sadly numerous and most miserable class of sufferers.

From observations made during many years, he has been led to divide the forms of Cretinism into five classes, only one of which he finds to be hopeless and incurable. And if we may consider it as a fact established by the result of his experiments, that the evils of this hideous infirmity, in four cases out of five, do not proceed from the non-existence of mental faculties, but from the want of their development; if it be proved that under a certain state of bodily disorder, the powers of the mind are dormant, and may, by a system of medical treatment acting on that disorder, be so roused into action as to become capable of taking an interest in the ordinary occupations of life; we may surely hail the philanthropic labours of Dr. Guggenbühl on the Abendberg, as laying down facts of high importance to the human race at large; inasmuch as they have a direct bearing upon those cases of mental imbecility which have hitherto been considered as beyond the reach of cure. Amid the great advances made in every department of science connected with the medical profession in the last twenty years, especial gratitude seems due to those who have directed their studies to the influence which body and mind mutually exert upon each other\*

A noble result of the better understanding of this is already seen in the altered treatment of those un-

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\* This subject is carefully treated in NEWNHAM *on the Reciprocal Influence of Body and Mind*. Hatchard. 1842.

happy persons, whose want of rational self-guidance has caused them to be shut up in asylums; where, however, a new system of kindness and indulgence appears to have superseded the former severity and cruel restraint, and it is said they are now in more cases restored to society, than retained under coercion as dangerous to its interests. And if it has been demonstrated by Dr. Guggenbühl's successful labours, that, even the Cretins, whose intelligence has been thought to rank below that of brute animals, when brought under his system of education at an age sufficiently early, are capable of being trained up to social usefulness, and raised even to a sense of moral duty and religious responsibility; it is not unreasonable to expect that the further improvement, and carrying out of his plans of treatment may lead to triumphant medical results, which may demonstrate the power of cultivating intellect in other cases, where it has not been thought to exist, and carry hope and joy to many a parental heart which has hitherto pined over an imbecile child, in concealment and despair.

Surely the modest and unpretending philanthropist who has disinterestedly devoted both his time and his entire means to the practical elucidation of this delicate and mysterious subject on the Abendberg, may claim public support for his hospital, on the ground of the benefit he confers on his fellow men.

But in a cause which involves the first principles of duty, higher motives may be urged. And in making this appeal, it is with pleasure we reflect that institutions, such as the world never heard of before,

for the permanent relief of disease and infirmity among the poor, were seen to have their rise throughout the whole length and breath of Europe, from the new impulse given to human exertion at that blessed æra, which first proclaimed "good-will toward men," and declared Christian love to be the test of Christian faith. From the reign of Constantine, as the doctrines of Christianity spread, the leaven was at work which gradually gave rise to those splendid endowments for various charitable objects, which are now the ornament of our own, as well as other Christian lands; and there have never been wanting those, who, upon every fresh call, like the present, by the devotion of their time and means, have humbly aspired to walk in the steps of Him, whose glorious character on earth it was, that "He went about doing good." It is pleasing to observe how the disinterested labours of Dr. Guggenbühl, having been undertaken in this spirit, first attracted public notice in his own country, and have since met with encouragement and aid from every part of Europe where they have yet been made known.

In 1840, a Committee was formed at Hamburg, by the benevolent Dr. Buek, who is co-operating with Dr. Guggenbühl in a work on Cretinism. This was the first instance of help coming from a distance. A recent work published by the Countess Von Hahn-Hahn, who visited the Institution last year, has also been the means of adding to its funds; and at Berlin, attention has been successfully called to the subject. In Paris and at Lyons the Institution has



its advocates. At Amsterdam, also, there is a society for advocating the claims of the Cretins, which was formed by Dr. Herckenrath, with whom have united Dr. Vrolik, Professor of Anatomy and Physiology; and A. G. Van Cappelle, rector of the Gymnasium, and other persons of influence. At a meeting of the members, Dr. Herckenrath, the president, read a paper on the present hopes for the cure of Cretinism, in which he says, "Already does the asylum of the Abendberg show its good results, and there can now no longer be any doubt, but that the only limit to the number cured will be the support it may receive. Let us remember, that by far the greater proportion of these wretched creatures are found among the poor, and, being weak in body and mind, have an undoubted claim on all Christians. There is a charity, which does but tend to increase indolence and vice, but here is an object for which the highest principles of wisdom and Christian love should be exercised. These poor helpless beings, so long banished from the society of their fellow-creatures, have now a place of refuge, where they may be raised from their misery and inaction, to be useful and happy members of society." What has been done in Switzerland may be seen in the Appendix.

Thus, then, does it appear, that on the Continent, the efforts of Dr. Guggenbühl are meeting with sympathy and support. But it is to the kindness and goodwill of England that the friends of Switzerland may appeal with the most confidence. Probably in no part of Europe are there so many who have visited

that interesting country, and found delight in her varied and magnificent scenery. Now, when an appeal is made on behalf of a portion of her children, who are suffering under the saddest complication of mental and bodily diseases, it is trusted that it may not be made in vain, and that England will help liberally.

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## PART II.

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THERE is probably no part of any country in Europe, where there are so many instances of degradation in body and mind, from peculiarity of climate, as in some valleys of Switzerland. This imperfect development in all, which characterises a rational or healthy being, is endemic in various localities, body and mind being alike affected. It is known generally by the name of Cretinism: the word "Cretin" is said to be derived from "Cretira," which in the Romance or old Italian language, (still prevalent in a part of the Canton Graubündten,) means "a poor creature;" and if so, most appropriate is it, for no affliction is so well calculated to excite sympathy in all, who know the high privileges and happiness of a sound mind and healthy body, as one which deprives a fellow-creature of all enjoyments in this life and all idea of a future.

It is a state compatible with length of years, and therefore would be one of awful misery if the poor sufferers knew the full extent of their misfortune, but happily, incapable of true enjoyment, they live in a state of unconsciousness.

To the passing traveller they are objects of horror, forgotten perhaps as soon as seen, or remembered only as detracting from the charms of their lovely land; but the parents bestow on these poor creatures the fullest measure of their love, some, because they believe

them to be blessings sent from heaven, but far more it may be hoped from that true and instinctive impulse, which leads every parent to bestow the most love on the child which needs it most. If a child were born blind, or deaf, or an idiot, or so deformed as to be certainly doomed to a state of dependence on others, a parent would naturally treat it with more than usual tenderness. How much more so then, if it were born, as the Cretin often is, with all these defects, and other diseases of the gravest kind. They are in fact, so dependent on others, that to them a day of neglect would be the day of death.

Cretinism is one of those states of existence which has never been explained by writers on the laws of health and disease, or on the peculiarities of races of men. It has thus been classed according as each author thought one sign its characteristic among mental maladies, constitutional diseases, or degenerations. This however might naturally be expected, as no enlarged view of its nature has ever been taken, and no hope existed of being able to afford the slightest relief.

A full and sufficient description of the state implied by the word Cretinism has not yet been obtained, and even an enumeration of the chief features was not a complete picture of the Cretin.

Felix Plater, in 1614, was perhaps the first who described the characters of this malady, under the name of stupidity. "There are some stupid creatures, who besides being born so, have other vices of conformation: they are chiefly seen in valleys, sitting

at the doors of the cottages, staring upwards, or playing with sticks in their hands, and grinning at passers-by. Their heads are misshapen, and mouths and tongues so thick and swollen, that many are unable to articulate sounds. They were indeed hideous to see."

Saussure says, in his *Travels in the Alps*, "that he could never forget the Cretins whom he saw at Villeneuve, where the most frightful form was combined with absence of intelligence."

In the following account, Cretinism will be considered in its chief forms, under which any single case, may more or less nearly be ranked. The sole condition, which prevails in all, is a want of tone or energy, evident either in the whole being, or in a particular series of organs. It will therefore be considered under the following forms:—1, Goitre; 2, state of the Albino, (though the peculiar character from which it is so called, does not exist in the Cretin); 3, where the Cretin is deaf and dumb; and 4, where it is an idiot. This is not an arbitrary or accidental division, but rests on the right conception of the malady, which is a state of degeneration of the organizing powers, congenital, or acquired in the earliest period of childhood.

Cretinism is therefore more or less, in each form, that state, which is induced by a want of due development in the body, and the powers of the mind.

In the following account it will be shown, first, how the Alp-goitre differs from the occasional goitre, as in Derbyshire or in other parts, where Cretinism

does not exist. Secondly, How the constitution of the Cretin resembles, yet differs, from the state of the Albino, who is so only accidentally. Thirdly, How the state of deafness and absence of speech differs from that of the deaf and dumb; and lastly, How the idioty of the Cretin differs from the common form. Each form, however, may be shaded off into another, or even all may exist in the same individual.

1. The form of Cretinism in which the mind suffers the least, is where goitre exists at birth. It is considered as a form of Cretinism, because wherever goitre is frequent in childhood, there are Cretins. Still, as there are many Cretins who have not goitre, so are there many, rational beings, who have it.

The great distinction between goitre where it is endemic, and where only occasional and accidental, is that while in the former case it occurs in the earlier years of childhood, in the latter it appears in more advanced life. When goitre is congenital, it has been ascertained, that if it disappears during the earlier months, the child becomes a Cretin, and then the goitre re-appears and never goes away. It usually however begins at a later period, as the eighth or tenth year, and is the cause of the livid tint of the skin, as it impedes respiration. It also more or less affects the power of distinct articulation, as Saussure remarked. It is found also, that generally where goitre is prevalent, the mind and body are deficient in vigour in those who are so afflicted.

2. The second form is seen in other parts of the world far oftener than in Switzerland, where it is very

rare; but as the true character of it is seen in almost all Cretins, it must be considered as one form. Those who have the peculiarity in question, are called Albinos, from the white colour of their hair. This state is not a disease, as it does not, if merely accidental, interfere with the powers of body or mind, as instances have been known of Albinos being remarkable for activity in both. Neither is it a characteristic sign of a race, for there is no instance of a race being born and continuing in a state of disease, as this is, when endemic. There are, it is true, various peculiarities to adapt each race to its climate, but there is certainly no instance of a race, whose distinguishing character is an imperfect development. Neither is it a disease of the skin, as has been often thought, or owing to a want of blood. It must therefore be considered from a higher point of view, and in connection with other phenomena.

Now Rudolphi has asserted that this state has no connection with Cretinism. This may be granted, so far as that every one with goitre is not therefore a Cretin, and thus an Albino may also be far from being in that peculiar state of degeneration of body and mind, which exists in the true Cretin. But where it is endemic, there are states very different: then are seen united the true characters of the Cretin and the Albino, though the peculiarity of the white hair does not exist. There is the same flabby, pale skin, arising from a want of due development in that part, on which its powers of resistance depend, a languid habit of body, and infirm mind, and in both intole-

rance of light, though from different causes. Thus is this form not only allied to Cretinism, but it is the actual state itself, seen in a special series of organs and in a peculiar manner.

Light is to a human being not the mere means of vision, but a source of energy to the mind and body : all that invigorates and ennobles, is more or less acquired through the senses of sight and hearing. The paleness of the skin, the whiteness of the hair, and the absence of the dark pupil in the eye, are but the outward signs of the internal state, which is essentially an imperfect development of the entire being. The character, therefore, of this form of Cretinism must not be considered in its mere outward aspect, but must be understood in its internal condition. Those individuals, who are born without the usual colour of the hair, skin, and eyes, if the state is endemic (as in part of the tropics and island of Ceylon,) generally are of feeble constitution in body and mind\*. This debility is manifested in various ways ; the skin and muscles have so little tone that many of these sufferers are doomed to a state of inactivity ; the eye, too, cannot bear the light of the sun, so that it is constantly trembling to remove the excitement. The light of day is to them darkness, the hour of twilight in the evening and morning is the sole hour of vision. As the eye is imperfect, so is the mind deficient in vigour. One character prevails throughout the whole being ; as the body is weak, so is the mind imbecile,

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\* ESQUIROL *sur les Maladies Mentales*. Paris, 1838, t. ii., p. 357.



both being imperfectly developed; intellectual and moral energy are therefore wanting, as well as bodily activity.

This is as well defined a form of Cretinism as any, and it may extend to entire blindness, and extinction of all mental capacity.

3. This is the form in which the Cretin is deaf and dumb. It is unlike the last in being frequently connected with goitre. Those who are born Cretins, are often recognised as such by their thick throats, large swollen tongues, and thick lips. In them the ear is so dull and inactive that it transmits no impression to the mind, so that the Cretin is necessarily dumb, not only because he cannot hear, but because the organ of speech is unable to express a thought, even if it were conceived. In some cases this state of imperfect hearing and articulation occurs independently of Cretinism, and there is then a want of harmony in the words, if not even a great difficulty in uttering any intelligible expression. This is not as in those who being deaf, speak too loud, or not loud enough, because they do not rightly judge of the pitch of their own voices, but it depends on the state not only of the ear but also of the organs of speech. So the Cretin is not only incapable of speech, because he is deaf, but also from inability to express the sounds. Often the only sound which is uttered is like a cry of a brute animal. The faculties of hearing and speech are so closely related to the mind that it will be no cause of surprise that such a Cretin should also be an idiot.

And this is the fourth and last form.

4. The word idiot in its usual acceptation, and as defined by Esquirol, implies a state in which the intellect never has been and never can be developed, as it depends on a congenital malformation or imperfect development which is irremediable.

Esquirol considers Cretins and Albinos as varieties of idiots, differing in no essential point, but only in symptoms characteristic of each.

Of the Cretins he says, "they present the same shades of intellectual power, and the same physical and moral apathy as idiots, and are only different because the Cretins are usually afflicted with goitre." The latter remark is incorrect, and the above definition does not appear to be applicable to the Cretin.

As Cretinism is more a bodily than a mental malady, idiotcy or imbecility cannot be its chief character. It is true, that in all Cretins there is a certain degree of want of mental vigour, but it is only a sign of the same absence of due development, bodily and mental, as existed in the other forms. In the case, too, of the Cretin, though the head is always more or less misshapen, its imbecility is not, perhaps, so much owing to the malformation as to want of vigour in the part formed. Already changes in these faulty proportions have been observed to occur as the mind became developed. The only difference between this and the former classes is, that while they are more visible outwardly and bodily, this exists inwardly and mentally.

The eye and the ear are intimately connected with



the activity and development of the mind, as while the eye conveys to it the impressions of the external world, the ear is the interpreter of the word. If, then, the eye shuns the light, and the ear never hears a sound, moral and intellectual energy cannot be developed, and the whole being must be devoid of all that characterizes a rational creature.

Thus, then, though the signs of Cretinism be chiefly manifested in a want of vigour in the body, it invades the system of the senses till it reaches the mind. Such beings may therefore with truth be called poor creatures, for their minds and senses are, though existing, so dull that they appear to react on no impression, and it was on this account that no attempt at their cure was ever before made.

All experience has been lately tending to the opinion, that if hereditary maladies are to be arrested, it can only be done in the earliest years of childhood. This will no longer be doubtful, since it has been found that a Cretin ill-developed in the body as relates not only to the organs of sense, as the eye and ear, but as to those of nutrition, and afflicted with epilepsy and scrofula, may become a healthy child if it have the advantages of climate and judicious treatment. It is true that Cretinism is not always hereditary, as parents in perfect health and of sound minds may have a Cretin child, while Cretin parents may have a healthy one. Still as concerns the curability of it, the age of the child is most important, as it has been ascertained that if the malady shows itself soon after birth in faulty development, the less it is com-

plicated with other diseases, as epilepsy, water on the brain, &c., and the more regular the formation of the head; the greater its inclination to activity and to speaking, and the earlier it is placed under treatment with the advantages of climate; the more sure is its cure. If a child, born apparently in good health, does not continue to be well developed during the first year, it is observed that nutrition first fails, then the powers of speech and walking, and then the arrest of development becomes complete, if the child is not soon placed in the most advantageous situation\*.

Thus it is evident that if this malady is to be arrested, the children cannot be sent to the Institution too early. The rule, therefore, is, that none will be admitted after six years of age, as the chances of cure diminish as the age increases; though it has already been proved that it need not be strictly observed. With regard to the causes of this dreadful malady, so far as relates to climate or peculiarity of soil, there seems to be but one condition which prevails in all parts, where Cretinism is endemic; and this is, the damp, warm air of the close valleys among the mountains, where there is no free circulation. Still even this cause may, perhaps, be found not to exist in some part of the world, for there are Cretins in America, Asia, and Africa, and thus this alone, as many other causes, may be found insufficient. Heat, however, and malaria are not alone its cause, as

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\* These facts are stated on the authority of Dr. Guggenbühl.

neither exists in excess, where Cretinism sometimes prevails.

As to the number of Cretins, it is at present unknown. In a journal published at Berne in 1840, it was said that in 1812, there were in the Canton of Valais, 3000, in that of Bern, 1350, and in Argau, 28 villages where Cretinism was endemic. This is probably but a very small part of those in Switzerland, as it does not include the cantons of Graubünden, Uri, Unterwalden, Glarus, St. Gallen, Waadt, &c., where Cretinism especially prevails. Père Girard calculated from reports from several cantons, that there were perhaps 8000 of the highest kind, and thinks, that if the lower kinds were included, the number might certainly be doubled, perhaps trebled. This will, however, soon be ascertained, as at the meeting of the Swiss Association for the Advancement of Science at Zurich in 1841, three resolutions were passed. 1. To circulate questions as to the number of Cretins in Switzerland. 2. To report on the Institution on the Abendberg. 3. To address a petition to the legislative body of the nation, to call on the different cantons for help. At the meeting in July, 1842, at Altdorf, a report was presented, but is not as yet published. The institution, however, on the Abendberg is recommended as deserving of support. See Appendix, p. 37.

As this experiment has been tried for so short a time, and on so limited a scale, no inferences can at present be drawn, as to how much can be effected. Still the results seem decidedly to confirm the expec-

tations of Dr. Guggenbühl, that the tendency to a complete arrest, both of intellectual and physical energy, may be checked in the earliest years of childhood, by the combined advantages of the pure and invigorating air of the highest mountains, and judicious treatment by diet and medicines.

Surely here is a vast field of most interesting inquiry, and one too, never previously entered. The education of beings, in whom there never was the faintest glimmering of intelligence, and the cure of diseases, which so frequently destroy the highest hopes of the parents, is here accomplished. How often is it said when the sure signs of fatal disease, or imperfect development, are too evident in a child, that it will outgrow it? Thus, alas! neglecting the only time, as is now proved, when help can avail to stop the hand of death.

What fitter opportunity than this, can there be for testing the doctrines of phrenology, and learning the relation of the parts of the brain and skull to the intellect? Already have decided changes in the shape of the head been observed, and are recorded to form the ground-work of future truths.

Surely here are sufficient motives, even if no higher existed, for assisting Dr. Guggenbühl to carry out his truly philanthropic and Christian plan, as on his success will depend the extirpation of Cretinism. When he has had the experience of ten years, and a hospital of fifty or sixty patients, then such proofs of our power over this most dreadful of afflictions will doubtless be obtained, that every canton, where the

Cretins are numerous, will have its hospital for their cure. And what brighter or more glorious page can there be in the history of that land, if a century hence, it should be recorded, that all Europe helped to exterminate Cretinism? May it never be there said, that England had no share in that noble deed. When it is remembered how liberally aid is given not only where true charity is the moving principle, but where the ascertainment of physical truths is the sole object, surely this cause, where both motives combine, should receive the help it so greatly needs, that the truly benevolent author of this experiment may realize his hope, that this misfortune of his country may be removed. He, almost unaided, but confident in his cause, began his experiment at his own expense, and long received but little aid. Now, however, his prospects are brighter, as all Europe is beginning to sympathize in the cause, and there is every reason for hoping that this year sufficient means will be obtained to erect a hospital, which will have the advantages which the present châlet has not. Then will the sounds of the chimes, re-echoed from mountain to mountain tell to the distant valleys, that the dreadful malady which has long there raged, no longer has its victims unopposed, but that at last one has arisen to stop the course of that flood, which for centuries has devastated the valleys of Switzerland.

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The following gentlemen have kindly consented to record their approval of the design of these pages, and their willingness to aid in promoting the Institution :—

Right Reverend the Lord Bishop of Winchester.  
Right Reverend the Lord Bishop of Ripon.  
Right Reverend the Lord Bishop of Sodor and Man.  
Honorable Mr. Justice Patteson.  
Honorable Mr. Justice Coleridge.  
Henry Revell Reynolds, Esq.  
Sir George Larpent, Bart.  
Venerable Archdeacon Hoare.  
Venerable Archdeacon Wilberforce.  
Reverend Dr. Dealtry, Chancellor of Winchester.  
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Reverend Dr. James, Canon of Peterborough.  
Reverend William James, Vicar of Cobham.  
Reverend Edward James, Canon of Winchester.  
Reverend James Powell, Vicar of Bitteswell.  
Reverend George Brewster Twining.

*Treasurer*,—RICHARD TWINING, Esq.

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Donations will be gratefully received by Messrs. Twining, Bankers, 215, Strand, to whom contributions for the "Hospital on the Abendberg" may be sent through any London or country Banker. Any communication on this subject may be addressed to Dr. W. Twining, 13, Bedford Place.



## EXTIRPATION DU CRÉTINISME.

ADRESSE AUX AMIS DE LA PATRIE ET DE L'HUMANITÉ.

J'AI l'honneur de vous rappeler, que la Société Helvétique d'Histoire Naturelle a, dans sa dernière réunion, dirigé l'attention de tous les Suisses sur la guérison et l'extirpation des maux, dont le Crétinisme afflige un certain nombre de ressortissants de notre pays. Je me suis proposé pour but de travailler à cette œuvre en m'appuyant sur l'assistance que donne le principe d'association. Aussi les sections cantonales de la Société Helvétique dressent-elles en ce moment une statistique exacte de cette classe malheureuse de la Suisse. Le Révérend Père Girard, notre Président, en évalue le nombre à huit mille. En présence d'une telle calamité, il est urgent de mettre à contribution la philanthropie des âmes compatissantes, en établissant pour ces infortunés un asile où ils seront entourés de tous les soins possibles : Cet hospice doit être, suivant nos plans, situé sur les hauteurs de l'Abendberg, dans l'Oberland Bernois.

Des expériences faites depuis longtemps au Valais ont prouvé, que l'affreuse maladie que nous signalons, a pu être combattue avec succès ; dans des cas où elle n'était pas trop avancée et en racinée, par la translation de ses victimes sur les montagnes. Il y a donc tout lieu, de croire à la possibilité de guérir les sujets atteints de Crétinisme. Dans cette persuasion, nous

invitons les hommes éclairés et dévoués de la patrie à intéresser à notre projet l'universalité du peuple Suisse, qui ne voudra pas faillir en cette occasion à la place honorable qu'il occupe dans la civilisation Européenne.

Le premier asile, qui sera créé, s'élèvera sur l'Abendberg, connu par l'établissement agricole forestier si plein d'intérêt que Mr. Kasthofer y a formé ; il sera situé à une hauteur de 3400 pieds au dessus de la mer. Un second sera établi à 5000 pieds, parceque des observations suivies ont prouvé que la guérison du Crétinisme dépend des différents degrés d'élévation, auxquels on transporte les malades. Le soussigné se chargera des soins médicaux et de la direction de l'établissement. Il sera aidé par un homme exercé à l'éducation des sourds-muets, et par un nombre suffisant des sœurs de la charité, personnes si connues par leur dévouement affectueux dans les hopitaux de l'Europe. On y accueillera des Crétins de toutes les contrées de la Suisse on s'efforcera de les tirer d'une condition auprès de laquelle l'état même des peuples les plus sauvages paraît digne d'envie.

Tous les amis de l'humanité et de la patrie qui savent dans quels misérables réduits, dans quelles étables même ces infortunés traînent le plus souvent leur existence chétive, s'empresseront, on peut l'espérer, de nous tendre une main secourable et de nous aider à frayer pour ces malheureux la voie de la délivrance. Pour arriver à ce but, il faut qu'il se forme dès à présent une association entre les âmes les plus nobles et les plus généreuses du pays ; leur bien-



veillante coopération à cette œuvre leur fera cueillir, dans l'histoire de notre civilisation, un laurier qui ne se flétrira jamais. En sollicitant votre intérêt pour cette institution, en vous invitant à déposer sur l'autel de l'humanité une offrande nouvelle, j'ai l'honneur de vous annoncer qu'aussitôt que la société de l'Abendberg sera définitivement constituée, les noms et les souscriptions des donateurs seront publiés dans un écrit spécial, destiné à faire connaître tous les détails désirables sur l'organisation de l'établissement.

J'ose espérer, qu'en vous associant à cette œuvre essentiellement charitable et chrétienne, vous daignerez me permettre d'inscrire votre nom sur la liste des fondateurs de l'hospice des Crétins de l'Abendberg.

GUGGENBÜHL,

*Doct.-Médecin.*

*Hofwyl (Canton de Berne),  
Octobre, 1840.*

AVIS de la SOCIÉTÉ SUISSE DES SCIENCES NATURELLES  
sur l'Etablissement pour la Guérison du Crétinisme  
sur l'Abendberg, en Suisse, émis dans sa Réunion  
à Altdorf, au mois de Juillet, 1842.—Traduit de  
l'Allemand par M. OBER.

QUAND nous eûmes l'honneur, au mois de Juillet de cette année, de voir se réunir chez nous la Société Suisse des Sciences Naturelles, la question du Crétinisme y fut traitée aussi, conformément aux décisions prises l'année passée à Zurich. On avait résolu alors :

1. d'établir une nouvelle série de questions pour la

statistique du Crétinisme dans notre patrie ; 2. qu'une commission devait soumettre à la Société, dans sa réunion de l'année suivante, un rapport sur l'Etablissement de l'Abendberg, près d'Interlaken ; et que 3. cette même commission serait chargée d'adresser à la Haute Diète une pétition afin de la prier de recommander à la sollicitude des gouvernemens des différens Cantons ce sujet si important pour notre patrie.

La commission rendit compte du résultat de ses travaux dans un rapport étendu, où elle fit part à la Société que, se conformant fidèlement à son vœu, elle avait établi, avec une activité incessante, les questions sus-dites, au moyen desquelles elle avait rendu plus facile l'étude du Crétinisme ;—qu'elle avait donné en même temps une courte définition du Crétinisme—qu'elle s'était adressée à la Haute Diète et aux gouvernemens de tous les Cantons pour les prier de bien vouloir s'intéresser activement à la chose ;—qu'elle avait en outre invité Mons. le Prof. Demme à Berne de faire un rapport à la Société sur l'état et les progrès de l'Institution sur l'Abendberg pour la guérison d'enfans Crétins, établissement qui, bien que jeune encore, paraît déjà être devenu important ;—et que finalement elle n'avait pas manqué d'exprimer, au nom de la Société, sa gratitude particulière à toutes les personnes et aux autorités qui ont bien voulu lui fournir des renseignemens et matériaux précieux, ou qui ont fait preuve de l'intérêt qu'elles prenaient à l'entreprise par les secours et les services qu'elles lui ont rendus.

L'assemblée dans sa première séance, renvoya le

sujet à la section de Médecine, et la chargea de lui présenter son avis sur les moyens auxquels en devait avoir recours pour atteindre le but qu'on se proposait. La section, sous la présidence de Mons. le Prof. Tribolet, ne manqua pas d'examiner mûrement la question, et conclut unanimement, après avoir ouï une exposition de Mons. le Dr. Guggenbühl, fondateur et chef de l'établissement, à ce que cette institution devait être recommandée à la bienveillante consideration de la Société Suisse d'Utilité Publique. On vit aussi avec un vrai plaisir par le rapport mentionné ci-dessus, que plusieurs enfans, que Mons. le Prof. Demme eut occasion de voir l'année passée, et qui étaient alors dans un état de Crétinisme déplorable, sont maintenant complètement transformés en êtres humains, et se trouvent sur la voie du développement de toutes leurs facultés tant physiques que morales.

La Société Suisse des Sciences Naturelles estime en conséquence qu'il est de son devoir de recommander à la sollicitude les amis les plus estimables de l'humanité cette œuvre difficile, aussi importante que digne de notre époque, qui exige des efforts incessans et de grands sacrifices, mais qui commande au plus haut degré l'intérêt du philanthrope par son noble but, qui est l'éducation des malheureux Crétins, et leur délivrance de l'état de dégradation où ils se trouvent.

Nous espérons en concluant que l'avenir comblera nos vœux, non seulement à l'égard des malheureuses victimes de la dégénération en question dans notre chère patrie, mais nous souhaitons aussi de tout notre

Cœur, que les autres peuples, qui sont frappés du mal hideux du Crétinisme, imitront notre exemple pour le bien de l'humanité souffrante, comme la Suisse, après la fondation de la Société des Sciences Naturelles, vit se former des sociétés analogues même dans les états les plus cultivés de l'Europe.

Au nom de la Société Suisse des Sciences Naturelles :

*Le Président de cette année,*

DR. LUSSEK.

*Le Secrétaire,*

DR. MÜLLER.

